

## NESTING HABITS OF THE BEE, *NOMIS NORTONII* CRESSON, IN TEXAS.

BY H. B. PARKS, San Antonio, Tex.

Throughout April, 1928, the office of the Texas Apicultural Research Laboratory was busy answering inquiries about a black bee that was at work in the cotton and corn fields. These inquiries came from a territory some twenty miles wide and seventy miles long. The nearest infestation was visited and the following conditions were found. The "towns" as the farmers called them were located on points of hills or tops of ridges and ranged in size from a few nests to one town that was estimated by the owner of the land to cover over two and a half acres.

This large town was located on the point of a hill in a cotton field. The bees were so numerous that the hired help and mules refused to work over it. The entire surface of the location was covered with the soil brought out of the burrows and the air was filled with circling bees. Several burrows were dug out and gave the following. The tunnel went straight down through three inches of black loose soil where it encountered a wet red clay. Just at the surface of the clay a side tunnel one and a half inches long led to a room about one half inch in diameter. In this room was a newly emerged female. Three inches below the first side tunnel was another. The room at its end contained a pupa just ready to emerge. The main tunnel continued downward eighteen inches. The lower rooms contained balls of pollen and nectar with an egg on top. The inside of both tunnels and rooms showed that the surfaces had been plastered with some foreign soil. Observation showed that more than one female inhabited a burrow. The mass of wheeling, humming insects which so terrorized the hired help and the mules, were thought to be males, as females were common on the ground at the mouths of burrows. Many of the flying bees were caught and all proved to be females. The first report of this trouble came April 6, and a report July 1 said that all the bees had disappeared. On August 15 a hole was dug on the site of one of these towns and from a depth of eight inches to eighteen inches a live pupa was found in every room. Through the kindness of Mr. Geo. P. Engelhardt specimens were submitted to Mr. Herbert F. Schwarz, of the American Museum of Natural History, who determined this insect to be *Nomis nortonii* Cresson. He notes that Dr. Lutz has also noted this bee in vast numbers in Colorado.